



2017 Indiana FirstNet Conference

Cool Tools

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Device Ecosystem Vision



Summary



We are moving forward on all fronts with your help

Strategy

- Create rich and diverse device and application ecosystems serving all public safety needs
- Leverage industry standards, commercial technologies and best practices for scale
- Value add propositions which utilize Commercial off the Shelf (COTS) devices and apps

Vision

- Drive continuous innovations to meet public safety's evolving needs
- Support a vibrant public safety developer community
- Meet high levels of security and operational needs



Expectations

- Proposal for all components of the ecosystems in the RFP
- Best of breed solutions on all fronts
- Ever growing portfolio of devices, apps, services and more

Device Portfolio Vision



All inclusive vision building on economies of scale to target COTS pricing and availability



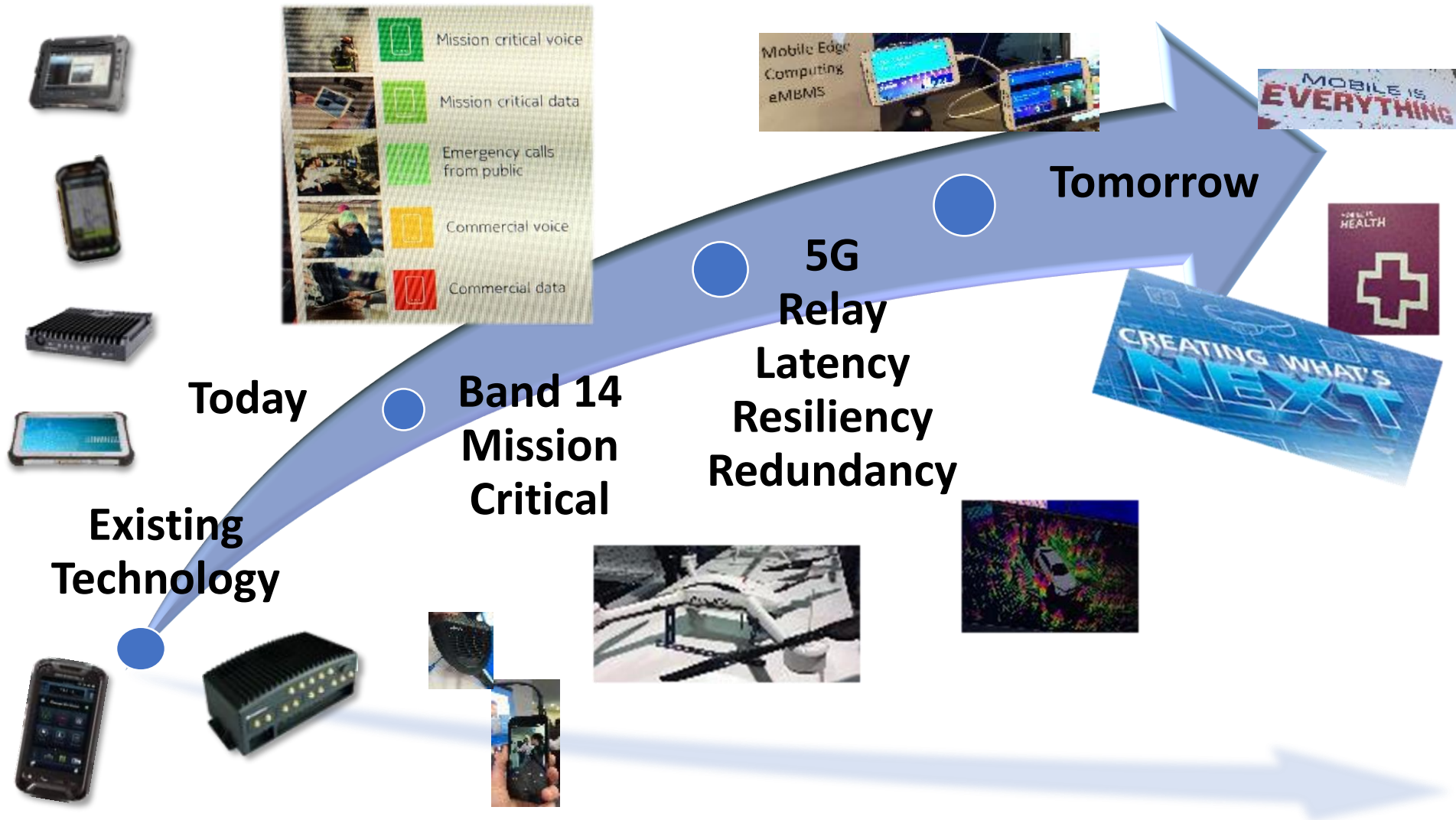
Types	<ul style="list-style-type: none"> • Smartphones • Tablets • Feature phones • Ruggedized • All operating systems 	<ul style="list-style-type: none"> • In Vehicle Routers • Hotspots / MDTs • Modems • High Power UE/ Vehicle Network System • Range extension / rural / repeaters • Satellite fallback 	<ul style="list-style-type: none"> • Hybrid • Wearables • Hands free • Gloved usage
Connectivity	<ul style="list-style-type: none"> • LTE, 3G, Satellite • Wi-Fi, Wi-Gig • NFC • Bluetooth • Tethering 	<ul style="list-style-type: none"> • LTE, 3G, Satellite • Wi-Fi • Ethernet • USB 	<ul style="list-style-type: none"> • LTE, 3G, Satellite • Wi-Fi, Wi-Gig • NFC • Bluetooth • LMR / P25
Current Band 14 Support	Only a few	Only a few	More to come

Future Portfolio Planning



- New device and accessory designs, driven by market research and public safety feedback
- Vendor quality feedback and administration
- Increase the diversity of PS devices with Band 14
- Consumer Band 14 devices to enable spectrum sharing
- Incorporate new innovations and categories
 - Sensors
 - Aerials
 - Virtual Assistants
 - Public safety focused accessories

Roadmap Vision



Complementary Role



- Accessories will link with user's devices for networking
- Headsets, earbuds that meet public safety guidelines
- Public safety workers and agencies can benefit from addition of sensors, video feeds and more
- Body cameras, voice recorders, virtual assistants



Accessories Portfolio Vision



Must support the device portfolio of Public Safety needs



Headsets



Vehicle chargers



Rugged cases



Remote speaker mics



Wired speaker mics



Belt clips



Multi-bay chargers



Car cradles



Car kits



Wearables



External Batteries



Scanners



Sensors



Cameras



eCitation terminals

Bring Your Own Device (BYOD)



- FirstNet will support robust BYOD capabilities
 - Designate requirements and approved devices
 - Develop recommended guidelines
 - Support agencies to specify their own BYOD policies
 - Support personal and public safety use in parallel (secure containers)
 - Support advanced device and application management (MDM/MAM)
- BYOD brings along support issues:
 - Device management
 - User / agency configuration
 - Security concerns
 - Data separation and isolation
 - Identity management
 - Profile administration
 - Subscriber provisioning
 - Life cycle support
 - Device firmware & apps updates

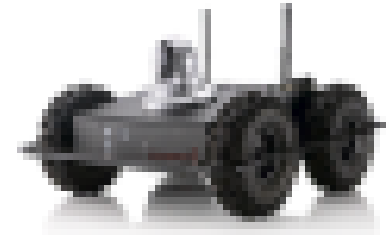


Security



- Critical to ensure a very high level of security and privacy, yet maintain access and support for BYOD
- Millions of disparate users, dozens of device models, and thousands of agency types present challenges:
 - Data isolation, access control, encryption methods
 - FirstNet access via LTE, Bluetooth, Wi-Fi
 - Removable media (e.g., SD cards)
- Supporting a variety of operating systems complicates the security model issues
- Inherent conflict between security tools and the paramount importance of operational needs

Internet of Public Safety Things IoPST



Sensors

Variety of drones and robots



Temporary
Cameras

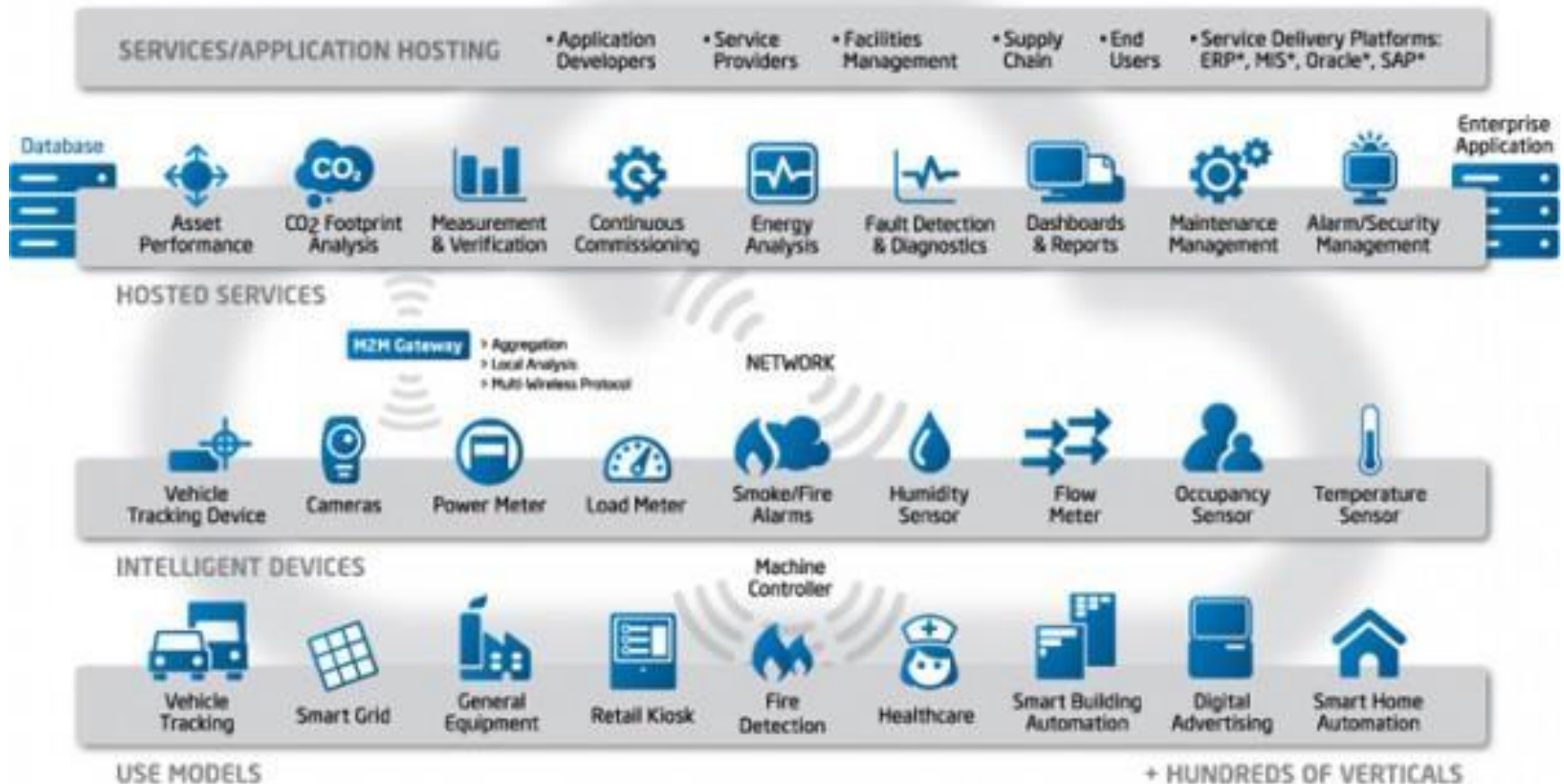


Temporary installations
sensors, monitors & etc.

M2M Ecosystems



M2M Ecosystem of Smart Services



High Priority Applications



Get Ready...Get Set...Go!



SMOG

TRAINING

POLICIES

STAFFING

TESTING

GOVERNANCE

BLOCK PARTY



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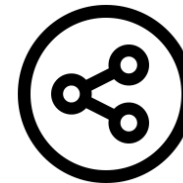


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